

Doepker Landscape, Inc.

605 Capistrano Drive.

Kalispell Mt, 59901

3-16-16

Flathead County

Planning & Zoning

1035 1st Ave W, Kalispell, Mt 59901

Attention: Donna Valade

Donna,

Please find attached our application for a variance at the Palmer Residence.

The purpose of this Lakeshore work is to create a natural swim beach by building a small spit into the lake that will naturally collect the natural lake gravel. This will create a small area, 28' wide, for smaller children to swim. The existing lakeshore is pretty rocky, hard to access. It has been kept in an almost natural condition. Previously a boulder wave buffer was built to prevent erosion. We are proposing to build a 4' wide walkway of Chief Cliff stone slabs to access the swim beach.

We have worked closely with Mark Lorang at the Flathead Biological Station on several lakeshore erosion problems. We have built similar spits to help prevent erosion. The spit will be built in the shape of a question mark. It will end up slightly below full pool. The design is to break the wave energy enough to allow fine gravels to collect on the lake floor naturally, thereby creating a swim beach. The neighbors to the east have a problem with gravel building up at their dock that has to be removed on occasion. This same affect will create our beach with minimal disturbance.

The stone path will extend under full pool water level by three steps. The large natural bed rock in the picture will flank the stairs. Two low voltage landscape lights will be installed along the pathway.

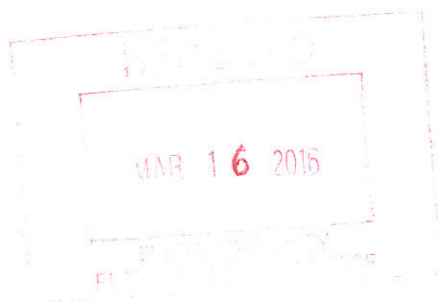
All boulders will be brought to the site by a path along the house; the only lake shore work will be setting the boulders. We will use plywood to access the site. We will install silt fences and straw waddles as necessary if soil is disturbed. Our intention is that very little native soil will be disturbed.

We have paid the fee for variance previously.

If you have any questions, please call me at 755-2372.

Thank You.

Jim





FLATHEAD COUNTY LAKE AND LAKESHORE APPLICATION FOR A VARIANCE

-must be submitted in conjunction with a lakeshore permit-

Lakeshore Construction Permit Application # FLP-14-12

I/We are requesting a variance from the Flathead County Lake and Lakeshore Regulations as described in Section 5.1 of the stated regulations. Below is a summary of the project and findings as to the need and appropriateness of the variance.

REASON FOR VARIANCE:

CREATION OF A SPIT TO HELP PREVENT LAKE GRAVEL FROM
MOVING DOWN THE SHORELINE TO THE NEIGHBORS DOCK.
TO DO THIS WE WANT TO PLACE RIPRAP ON THE LAKESHORE,
IN A SPIT CONFIGURATION.
WE ARE NOT CREATING MORE LAND (SEE ENCLOSED DRAWING)

SECTION OF REGULATIONS VARIANCE REQUEST APPLIES TO:

4.3 F SWIM BEACH CREATION

FINDINGS OF APPROPRIATENESS AND NEED:

What unusual circumstances exist such that a strict enforcement of these requirements and standards would result in an undue hardship to you?

THE OWNER DOES NOT HAVE A DOCK. THE LAKESHORE IS VERY
ROCKY AND THE WAVE ACTION MOVES ALL FINE GRAVEL TO THE
EAST. HE HAS YOUNG GRANDCHILDREN. WE WANT TO INSTALL
A MINIMAL SPIT TO NATURALLY COLLECT THE FINE LAKESHORE
GRAVEL THEREBY CREATING A SMALL AREA FOR YOUNG CHILDREN.

Are there any reasonable alternatives to this project which would allow you to conform to the above regulations? (Please list)

YES. IF WE INSTALLED A DOCK, THE SAME EFFECT WOULD
OCCUR. THE REDUCTION IN WAVE ENERGY WOULD CREATE
A NATURAL ACCUMULATION OF FINE LAKE GRAVEL.
THE OWNER WOULD RATHER NOT BUILD A DOCK.

Granting of the variance shall not have adverse impacts on the lake or lakeshore in terms of the "policy Criteria for issuance of a Permit" below during either construction or utilization:

GRANTING THIS VARIANCE WILL HELP REDUCE THE AMOUNT OF GRAVEL THAT THE NEIGHBOR TO THE EAST MUST REMOVE OFF HIS LAKE SHORE EACH WINTER. THIS WILL HELP REDUCE CONTINUING LAKE SHORE MAINTENANCE.

1) Will granting of the variance materially diminish water quality?

NO, THE MATERIAL WILL ALL BE ANGULAR RIP RAP, NO SILTS OR FINES WILL BE EXPOSED ON THE LAKE SHORE. THE FINE GRAVELS WILL BE MOVED INTO PLACE NATURALLY BY WAVE ACTION. SEE ABOVE.

2) Will granting of the variance materially diminish habitat for fish or wildlife?

NO, THE SPIT AND ASSOCIATED BEACH AREA WILL IMPROVE HABITAT FOR FISH

3) Will granting of the variance interfere with navigation or other lawful recreation?

NO, NOT AT ALL

4) Will granting of the variance create a public nuisance?

NO, NOT AT ALL

5) Will granting of the variance create a visual impact discordant with natural scenic values, as determined by the governing body, where such values form the predominant landscape elements?

NO, IT WILL FIT IN PERFECTLY WITH THE LAKE SHORE. IT WILL LOOK LIKE A NATURAL ELEMENT

6) Will granting of the variance alter the characteristic of the shoreline?

YES, IT WILL CREATE A WAVE BUFFER. THE LOSS OF WAVE ENERGY WILL ALLOW THE DEPOSITION OF FINE NATURAL, EXISTING, LAKE SHORE GRAVEL THEREBY CREATING A SMALL BEACH.

Applicant signature:

James E. Alcega
DOGRON LANDSCAPE

Date:

Doepker Landscape Inc.

From: Donna Valade <dvalade@flathead.mt.gov>
Sent: Tuesday, March 08, 2016 3:22 PM
To: 'doepkerlandscape@montanasky.com'
Subject: FLP-16-12 Jack Palmer

Jim-

I'm reviewing the application you submitted to the Planning Office on February 29, 2016 for Jack Palmer for the construction of the spit and walkway. In speaking with other planners in the office, it came to my attention that a lakeshore variance is more in line with what the Palmer's wish to do. The variance is needed for the question mark spit and fill behind it. If you have access to the Flathead County Lake and Lakeshore Regulations, sections which need a variance request for are:

Page 28 – Section 4.3 (E)(2)(c) Where active erosion is present and documented, an applicant may propose to regain erosional loss experienced in the past 12 months. No attempt shall be made to extend the land area into the lake any further. *WE ARE TRYING TO USE NATURAL LAKE ACTION TO CREATE A BEACH, WE ARE NOT EXTENDING THE LAND AREA INTO THE LAKE.*

Page 28 – Section 4.3(E)(2)(f)(4) Rip rap rock shall be placed at or landward of the mean annual high water line and be placed at a maximum slope of 2:1. *SPIT IS DESIGNED TO BE IN WATER BUT BELOW FULL POOL. IT WILL NOT CREATE LAND.*

Page 30 – Section 4.3(F)(2)(e) Fill projects for the purpose of expanding existing land areas shall not be permitted. *NOT EXPANDING LAND - SEE DRAWING.*

Page 30 - Section 4.3(F)(2)(h)(3) Placement of fill directly into the waters of any lake is prohibited.

NOT PLACING INTO WATER. WILL BE DONE AT LOW WATER.
The stairway can be included in the variance request. The lakeshore variance application can be found on our website. Please give me a call with any questions.

-Donna

Donna Valade
Planner I

Flathead County Planning and Zoning
1035 1st Ave W
Kalispell, MT 59901
751-8200
751-8210 (fax)

*DONNA, PLEASE SEE NOTES ON
LAKESHORE REGULATIONS.*

Any communications with the Flathead County Planning and Zoning Office are subject to relevant State and Federal public record and information laws and regulations, and may be disclosed without further notice to you.

- h. Concrete boat ramp edges shall be thickened to a minimum of twice the average thickness of the ramp in order to prevent erosive undercutting or breaking of ramp edges. In addition, the lakeward end of the ramp shall contain a 45o angle lip to allow tires to roll off the end as well as to dissipate wave energy as it rolls up against the ramp.
- i. Launching rails shall be suitably anchored to the lake bottom.
- j. The rails of the rail launching system shall not exceed four (4) inches in height and the rail system shall lie on and follow the grade of the existing lakebed and lakeshore. No portion of the rail shall extend more than 18 inches above the immediately adjacent land.

E. RETAINING WALLS

1. Policy Considerations

- a. Retaining walls significantly alter shoreline characteristics. They create a totally unnatural shoreline which causes alteration of wave actions, beach dynamics and shoreline erosion patterns.
- b. Retaining walls which do not follow the natural contour of the shoreline have a high probability of affecting erosion of neighboring properties and may have adverse impacts to the lake and lakebed.
- c. Other alternatives, such as rip rap, should be explored first. Retaining walls should be constructed only as a last resort. When used, retaining walls should be constructed only for the purpose of stopping shoreline erosion.
- d. Stone or wood retaining walls are preferred to concrete retaining walls. Only natural rip rap should be used.

2. Standards

- a. Retaining walls are permitted only where active erosion is present.
- b. The use of retaining walls solely for landscaping is not allowed.
- c. Retaining walls designed to extend the land area into the lake shall not be permitted. *WILL NOT EXTEND LAND - SEE DRAWING.*
- d. Retaining walls shall be built at or landward of the mean annual high water elevation and shall conform to the contours of the existing shoreline.

NO EROSION
OCCURRING, BUT ALL
FINE GRAVEL IS MOVING
TO NEIGHBORS TO THE
EAST.

A SPIT IS NOT
ALONG A RIP RAP, IT
IS A DIFFERENT IDEA.
IT SLOWS WAVE ACTION,
DOESN'T BREAK WAVE
ACTION.

- e. Where active erosion is present and documented, an applicant may propose to regain erosional loss experienced in the past 12 months. No attempt shall be made to extend the land area into the lake any further.
- f. Rip rapping shall constitute the primary retaining wall method. Rip rap retaining wall standards are as follows:
 - 1) Rip rap rock shall be angular and sized properly for the specific task.
 - 2) All rip rap rock shall be free of silts, sands or fines and acquired from a site outside of the Lakeshore Protection Zone.
 - 3) Rock may be hand picked from the immediate lakeshore but removal of said rock shall only be allowed if a solid armament of rock remains in place. The removal of any rock which exposes silts, sands or fines is prohibited.
 - 4) Rip rap rock shall be placed at or landward of the mean annual high water line and be placed at a maximum slope of 2:1.
 - 5) Prior to the placement of rip rap, filter fabric may be required to be placed along the shoreline and incorporated into the rip rap design to inhibit erosion and the washing of fines through the rip rap.
- g. In situations where rip rap will not suitably address the erosional process, the following methods in order of preference are allowed: rock-faced concrete wall, wood wall, or bare concrete wall. The following standards shall apply to the use of any of the above methods:
 - 1) When more than 12 inches of retaining wall is exposed in the lakeward side of the wall, rip rap complying with conditions f (1-5) above shall be placed on the waterward side of the wall such that the rock shall extend to within at least six (6) inches of the top of the wall when placed at a maximum slope of 2:1..
 - 2) The landward side of the retaining wall shall extend at least two (2) inches but not more than eight (8) inches above the level of backfill to inhibit surface water run-off which may carry fertilizer, herbicides, pesticides, etc.
 - 3) Within five (5) feet landward of any retaining wall, backfill shall

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consist of easily drained gravel, rock, stone, sand or a combination of the above. Drain or weep holes should be provided for in any wall. No attempt should be made to establish grass or a yard immediately behind a wall.

- 4) All material excavated for placement of the footings may be used as backfill behind the wall or else be deposited outside of the Lakeshore Protection Zone.
- 5) Backfill shall be limited to that amount necessary to re-establish the pre-existing slope and contours of the landward side.
- 6) If an existing wall has to be replaced, it shall be completely removed from the Lakeshore Protection Zone and the replacement wall shall be constructed in essentially the same location as the existing wall. If removal of the wall proves unfeasible or will cause environmental hazards (sedimentation, bank failure, etc.), a new wall may be constructed up to three (3) feet lakeward of the existing wall. Typically one such extension into the lake is allowed.

F. DREDGE, FILL AND SWIM BEACH CREATION

1. Policy Considerations

- a. Dredging of a lakebed or lakeshore may have adverse effects due to suspension of fine materials, re-suspension of nutrients and toxic materials, exposure of stable lakebed sediments to unstable conditions, removal of lakebed armament and creation of steep bench areas.
NO DREDGING WILL OCCUR.
- b. Filling of a portion of a lake may have adverse effects due to destruction of an aquatic environment, loss of habitat for fish and wildlife, creation of an unnatural shoreline, creation of steep bench areas and alteration of current flows and wave actions.
REDUCTION IN WAVE ENERGY.
- c. Filling of wetlands creates adverse effects due to destruction of an aquatic environment, loss of habitat for fish and wildlife, loss of water storage capacity and loss of the natural storm runoff cleansing functions and the natural nutrient entrapment functions of wetlands.

NO WETLANDS IN THIS LOCATION

2. Standards

- a. Dredging for the purpose of increasing the water depth of an area or creating an artificial harbor or lagoon is not permitted.

NO DREDGING WILL OCCUR.

- b. Dredging for the purpose of removing accumulated silt, sand or gravel which (1) blocks access to a docking area, (2) is behind an existing dock, or (3) is within the confines of an existing structure is only permitted if the area to be dredged is less than 500 square feet and all excavated materials are removed entirely from the lake and lakeshore areas and deposited so as to prohibit their re-entry into the lake.

SAME. WILL LIMIT DREDGING FOR NEIGHBOR TO THE EAST.

- c. Dredged areas shall be stabilized with a protective armament as soon as possible after excavation. In areas where there is a rock layer on the surface of the lakebed or lakeshore, such rock shall be removed and set aside, then replaced as a protective layer subsequent to the excavation.

ALL LAKE ARMAMENT WILL REMAIN.

- d. Dredging and/or filling is only permitted at the time of year specified on the permit.

WORK WILL OCCUR IN APRIL AT LOW WATER

- e. Fill projects for the purpose of expanding existing land areas shall not be permitted.

NO EXPANSION OF LAND AREA WILL OCCUR.

- f. Discharge of fill material directly into the lake shall not be permitted.

WE WILL NOT

- g. Filling of wetlands adjacent to a lake is prohibited.

NO WETLANDS

- h. Addition of rock to the lakebed and lakeshore protection zone is permissible activity but shall be reviewed on a case-by-case basis, subject to the following requirements:

- (1) Application of rock is allowed where the predominant existing surface is gravel.

THE SURFACE IS GRAVEL.

- (2) Application of rock is not permitted in the following areas: wetlands and sites subject to strong wave action or currents; sites covered predominately by vegetation; or below average low water.

NO VEGETATION, NORMAL WAVE ACTION,

- (3) Placement of fill directly into the waters of any lake is prohibited.

OK

- (4) All fill shall be clean, washed rock with a minimum diameter of ¾ inch and a maximum diameter to be determined at the time of on site inspection free of silts, sands and fines. Rock type, size and color shall approximate that existing on the adjacent lakeshore.

WE WILL MATCH EXISTING LAKESHORE ROCK.

- (5) Maximum fill depth is four to six inches.

NO FILL WILL OCCUR, JUST LARGER ROCK.